

## BIODIVERSITY SERVICES MARKETS



14.2 million hectares of tropical forest and their associated biodiversity are lost to deforestation every year. At this rate, 1-10% of the world's species could be lost over the next 25 years. Experts estimate the economic value of global biodiversity to be in the trillions of dollars per year.

- The combined commercial worth of all genetic materials is estimated at **US\$500-800 billion** per year.
- Insect pollination is worth **US\$40 billion** annually in the US alone. Throughout the world, 80% of food crops depend on animal pollination.
- Demand for organic farm products is increasing at a rate of 20% per year in the developed world and was worth **US\$20 billion** globally in 2000.
- Development banks and foundations in the US and Europe spend an estimated **US\$2 billion** annually to protect land from development.
- The US Department of Agriculture's Conservation Reserve Program pays over US\$1.6 billion annually
  for land use changes that promote soil retention, water quality and wildlife habitat on over 34 million
  acres.

The main buyers of biodiversity services are private corporations, international NGOs and research institutes, donors, governments and private individuals.

- The markets are nascent and largely supported by development banks and foundations in the US and Europe.
- Many of the more sophisticated markets have emerged in developed countries like Australia and the
  United States and in Europe, due in large part to well-defined property rights and strong regulation and
  policy.
- In developing countries, market-based conservation is most active in Latin America.
- By developing markets for ecosystem services, buyers and sellers promote good stewardship that will help protect valuable resources and services, including:
  - Habitat for wild organisms
  - Recreation
  - Pollination
  - Control of pests and disease
- Genetic and chemical information for agriculture and medicine
- Resilience to catastrophe and climate change such as flooding, drought, and desertification

## National and international policies help to drive expansion of biodiversity markets.

- The UN Convention on Biological Diversity and UN Millennium Development Goals call specifically for market-based solutions to conservation.
- Costa Rica has paid more than US\$80,000 for biodiversity services, keeps more than 300,000 acres under conservation management and is developing a clearing-house approach to trading bioprospecting rights and conservation management payments to private landowners.
- Australia is developing legislation that will transform "biodiversity credits" into property rights with a dollar value that can be bought and sold on the open market.

## Natural resources such as food, fuel and fiber are staples of modern commerce. Biodiversity services establish these and many other valuable natural resources as novel commodities. Currently, payments for biodiversity services occur in five distinct categories:

- Real estate value driven by presence of species: Private and public land acquisition, easements and rentals.
- Payment for access to species or habitat: Bioprospecting (searching for new plants and microbial strains), research permits, hunting and fishing permits and ecotourism.
- Payment for conservation management: Conservation easements, conservation land leases, conservation concessions, community concessions in protected areas and management contracts for agricultural lands.
- Tradable Rights under a Regulatory Cap or Floor: Wetland mitigation credits, development rights offsets and biodiversity credits.
- Biodiversity-friendly products: Ecolabeled products and socially responsible investing.

## The Ecosystem Marketplace will help biodiversity markets develop and grow. The Ecosystem Marketplace will:

- Provide guidance on biodiversity service markets and bring buyers and together to help bridge what conservationists estimate to be a \$US30 billion gap in funds for maintenance and expansion of protected areas.
- Provide practical information and tips through tools, library resources and articles to assist in the creation of markets and the participation of buyers and sellers in these markets.
- Illustrate and evaluate past transactions, contractual conditions and financial mechanisms that buyers and sellers need to create robust and active markets.
- Help investors tap this under-appreciated contributor to global, regional, and local economies through markets being established in places such as Costa Rica, Kenya, Guyana, Mongolia, South Africa, United States, Australia, Switzerland, Mexico, El Salvador, Colombia, Honduras, Guatemala, Panama, Russia and Madagascar.
- Provide governments around the globe with examples of successful local, national and international regulations.